## ATTACHMENT 3

## **Summary of 15-Day Modifications**

- 1. For new stationary diesel direct-drive emergency standby fire pump engines greater than 50 horsepower (hp):
  - a. Revise particulate matter (PM) standards to align with the ARB and federal PM certification standards for new off-road engines in place of the 0.15 grams/brake horsepower-hour (g/bhp-hr) PM standard.
  - b. Postpone compliance with Tier 3 and Tier 4 new off-road engine PM standards three years, and
  - c. Require that the number of hours of operation for the purposes of maintenance and testing be limited to those hours necessary to comply with National Fire Protection Association (NFPA) testing requirements.

These changes have been proposed in title 17, California Code of Regulations, section 93115(e)(2)(A)4. Also, a definition of "Direct-drive Emergency Standby Fire Pump Engines" has been added in subsection (d)(19.5). This definition reflects post-hearing modifications intended to simplify and clarify the description of such engines.

Since the same pump engine models are used in water-based fire protection and agricultural applications, small to medium direct-drive emergency standby fire pump engines are subject to the same availability issues as agricultural pump engines. In particular, the limited size, design, and manufacturer options anticipated for 0.15 g/bhp-hr PM-compliant pump engines over the next several years create auxiliary equipment compatibility issues with respect to replacing engines. It is necessary to align the PM emission limit for small to medium direct-drive emergency standby fire pump engines with ARB and federal new off-road engine certification standards (similar to the changes approved for agricultural pump engines) to ensure a continuous supply of fire pump engines in a variety of makes, models, and sizes.

In addition, direct-drive emergency standby fire pump engines must be modified to meet NFPA standards, recommended practices, and guidelines. The fire protection industry needs an additional three years beyond Tier 3 and Tier 4 compliance deadlines to design, produce, test, and certify direct-drive emergency standby fire pump engines and auxiliary equipment to meet both Tier 3-Tier 4 and NFPA requirements. Additional language [subsection (e)(2)(A)4.a.II.ii] clarifies that direct-drive emergency standby fire pump engine operation is not limited for the purposes of emergency use, emission testing to show compliance, and NFPA-required testing.

2. Revise the PM standards for new stationary diesel greater than 50 to less than 175 hp engines for all agricultural applications except agricultural generator sets to align with the PM certification standards for new off-road engines in place of the 0.15g/bhp-hr PM standard.

These changes have been proposed in subsection (e)(2)(E) because agricultural engines (except agricultural generator-type engines) are subject to the same availability limitations and equipment compatibility issues as described for agricultural pump engines and direct-drive emergency standby fire pump engines in proposed modification 1, paragraph 2, above. These changes reflect post-hearing modifications clarifying that, with the sole exception of generator sets, the provision applies to all new stationary diesel agricultural engines, not just pump and wind machine engines. Consistent with this clarification, the definition of "Wind Machine," formerly subsection (d)(70), has been removed.

3. Modify the definition of "emergency use" to include stationary diesel emergency standby engines used in parallel with grid power to track initial United States Department of Defense (DoD) missile launches where the loss of normal power would cause damage to, or loss of, government facilities and/or flight hardware.

This change has been proposed in subsection (d)(25)(G) because of the need for immediate power to abort a missile launch that deviates from an expected path. DoD satellite station operation of emergency standby engines in parallel with grid power during missile launch tracking is appropriate and necessary to protect people and property.

4. Allow districts to approve up to 40 hours of in-use stationary diesel emergency standby engine maintenance and testing at hospitals and other health care facilities.

Post-hearing modifications have been proposed in subsection (e)(2)(B)3. to ensure that health facility emergency standby engines currently limited to 20 or 30 hours per year of maintenance and testing may be allowed up to 40 total hours per year of such operation (i.e., 20 additional hours for engines currently limited to 20 hours per year and 10 additional hours for engines currently limited to 30 hours per year). A definition for "Health Facility" has been added in subsection (d)(34.5).

Hospital emergency power systems must comply with the maintenance and testing requirements of title 22, California Code of Regulations, section 70841, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) Comprehensive Accreditation Manual for Hospitals, and the NFPA. New JCAHO accreditation requirements, effective January 1, 2005, require more frequent and extensive testing than those in effect when the ATCM was adopted in February 2004. Allowing districts to approve up to 40 total hours per year of

maintenance and testing at health facilities that are currently limited to 20 or 30 hours of such operation should be sufficient to meet health facility accreditation requirements and to ensure that emergency standby engines will work during a power failure or other emergency.

5. Allow in-use stationary diesel emergency standby engine maintenance and testing in the presence of students at and near schools that also serve as the students' place of residence.

This change has been proposed in subsection (c)(21) as an exemption from requirements in subsections (e)(2)(A)1. and (e)(2)(B)2. that prohibit emergency standby engine maintenance and testing at or near schools when students are present. This change will allow emergency standby engine maintenance and testing at and near boarding and other schools which also serve as the students' place of residence and will ensure that these engines will work during a power failure or other emergency.

6. Clarify subsection (e)(2)(E)1., Table 5, footnote 1, to be consistent with subsection (e)(2)(E)2. regarding stationary diesel engines funded under State or federal incentive programs.

This change to subsection (e)(2)(E)1., Table 5, footnote 1, has been proposed to clarify that subsection (e)(2)(E)1. emission limits do not apply to an engine funded under a State or federal incentive program if the engine is sold from one agricultural operation to another prior to January 1, 2008. This clarification makes subsection (e)(2)(E)1., Table 5, footnote 1, consistent with subsection (e)(2)(E)2. as originally intended.

7. Clarify the compliance requirements for new stationary diesel engines that were acquired or submitted for approval, but not installed, prior to the effective date of new emission limits.

Post-hearing modifications have been proposed in subsections (e)(2)(A)3., (e)(2)(C)1., (e)(2)(E)1.a., and (e)(2)(F)1.c.l. to allow the air pollution control or air quality management districts (districts) to determine the time at which emission limit compliance requirements are triggered based on the date of engine acquisition or on the date an application was submitted for a district permit or registration for stationary sources. The post-hearing modifications also include revising the definition of "New Engine" in subsection (d)(44) and adding the definition of "Date of Acquisition or Submittal" in subsection (d)(13.5).

As a result of the long lead time from new engine purchase commitment to installation, an engine that complied with emission standards at the time of purchase or district permit or registration application submittal may no longer comply with current emission standards by the time it is ready to be installed. The inability to install and use such an engine could disrupt operation and cause

severe economic hardship. The changes being proposed will enable the districts to require compliance with emission limits in effect when a new engine is purchased or when a district construction permit or stationary engine registration application is submitted rather than with more stringent emission limits that became effective before the engine could be installed. Similarly, for a new engine that is not subject to permitting or registration, these changes would enable districts to require compliance with emission limits in effect on the date of purchase (i.e., the date shown on the front of the cashed check, the date of the financial transaction, or the date on the engine purchasing agreement, whichever is earliest). Alternatively, districts have the authority to adopt more stringent definitions for "Date of Acquisition or Submittal."

In another post-hearing modification, the definition of "New Engine" in subsection (d)(44) has been changed to exclude: 1) an engine installed after January 1, 2005, provided the district permit or stationary engine registration application was submitted prior to January 1, 2005, and 2) a model year 2004 or 2005 engine purchased prior to January 1, 2005. This change means that such engines would not be subject to the regulation's new engine PM emission limits and that dealers could complete the sales contracts for them.